REPORT NO. 78-3-20

FOREST INSECT AND DISEASE MANAGEMENT UNIT
U.S. FOREST SERVICE
DORAVILLE, GEORGIA

REPORT OF AERIAL DETECTION SURVEY

LAND OWNERSHIP OR SURVEY AREA: STATE AND PRIVATE LANDS

STATES: MISSISSIPPI AND ARKANSAS

AREA WITHIN SURVEY BOUNDARY: 921,600 ACRES (460,800 IN ARKANSAS)
(460,800 IN MISSISSIPPI)

DATE: JULY 11, 1978

PERCENT COVERAGE: 100%

AIRCRAFT: CESSNA 182

CREW: TERRENCE ROGERS, W. A. CAROTHERS

REPORT PREPARED BY: W. A. CAROTHERS

SURVEY OBJECTIVES: TO DETECT AND DELINEATE AREAS OF HARDWOOD DEFOLIATION CAUSED BY THE HACKBERRY BUTTERFLY (*Asterocampa celtis* B. AND L.) ALONG THE MISSISSIPPI RIVER FROM VICKSBURG NORTH TO ROSEDALE, MISSISSIPPI.

SURVEY RESULTS

APPROXIMATELY 72,700 ACRES OF DEFOLIATION WERE OBSERVED. LIGHT DEFOLIATION WAS DETECTED ON 28,500 ACRES, MODERATE DEFOLIATION ON 30,050 ACRES AND HEAVY DEFOLIATION ON 14,200 ACRES. DEFOLIATED AREAS WERE LOCATED ALONG BOTH SIDES OF THE MISSISSIPPI RIVER (REFER TO MAPS AND PHOTO).

CONCLUSIONS

AN EVALUATION OF THE POTENTIAL IMPACT OF THE HACKBERRY DEFOLIATION SHOULD BE CONDUCTED.

FOR ANY ADDITIONAL INFORMATION, CONTACT:

FOREST INSECT & DISEASE MANAGEMENT UNIT, S&PF
USFS - SOUTHEASTERN AREA

NORTHGATE OFFICE PARK, ROOM 2103
3620 INTERSTATE 85, NE
DORAVILLE, GA 30340
TELEPHONE: 404-221-4796

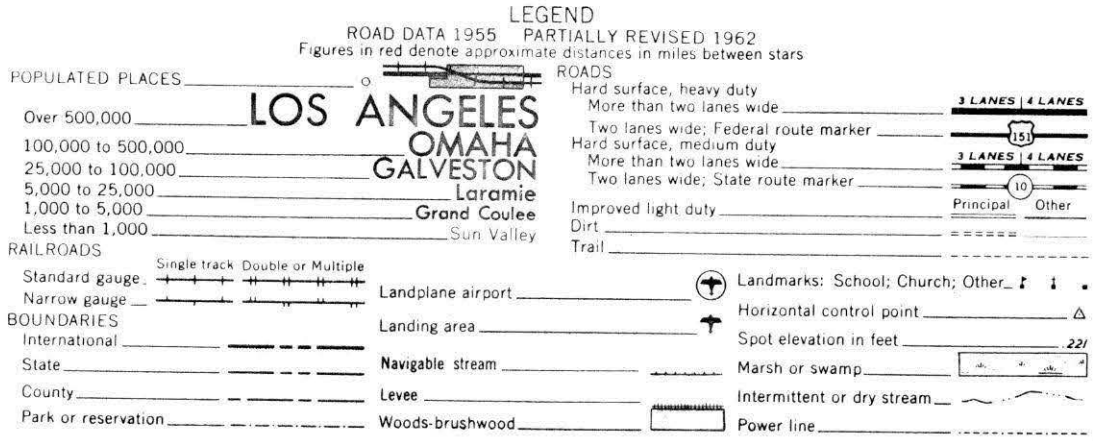
OR 2500 SHREVEPORT HIGHWAY
PINEVILLE, LA 71360
TELEPHONE: 318-445-6511

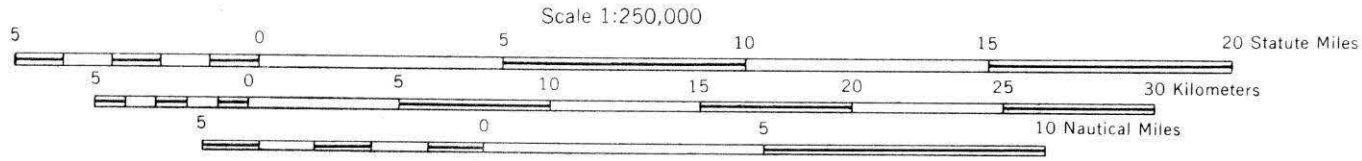
Hackberry Butterfly Defoliation
Survey
7/11/78
USFS Aerial Survey Team

L ► Light defoliation

M ► Medium defoliation

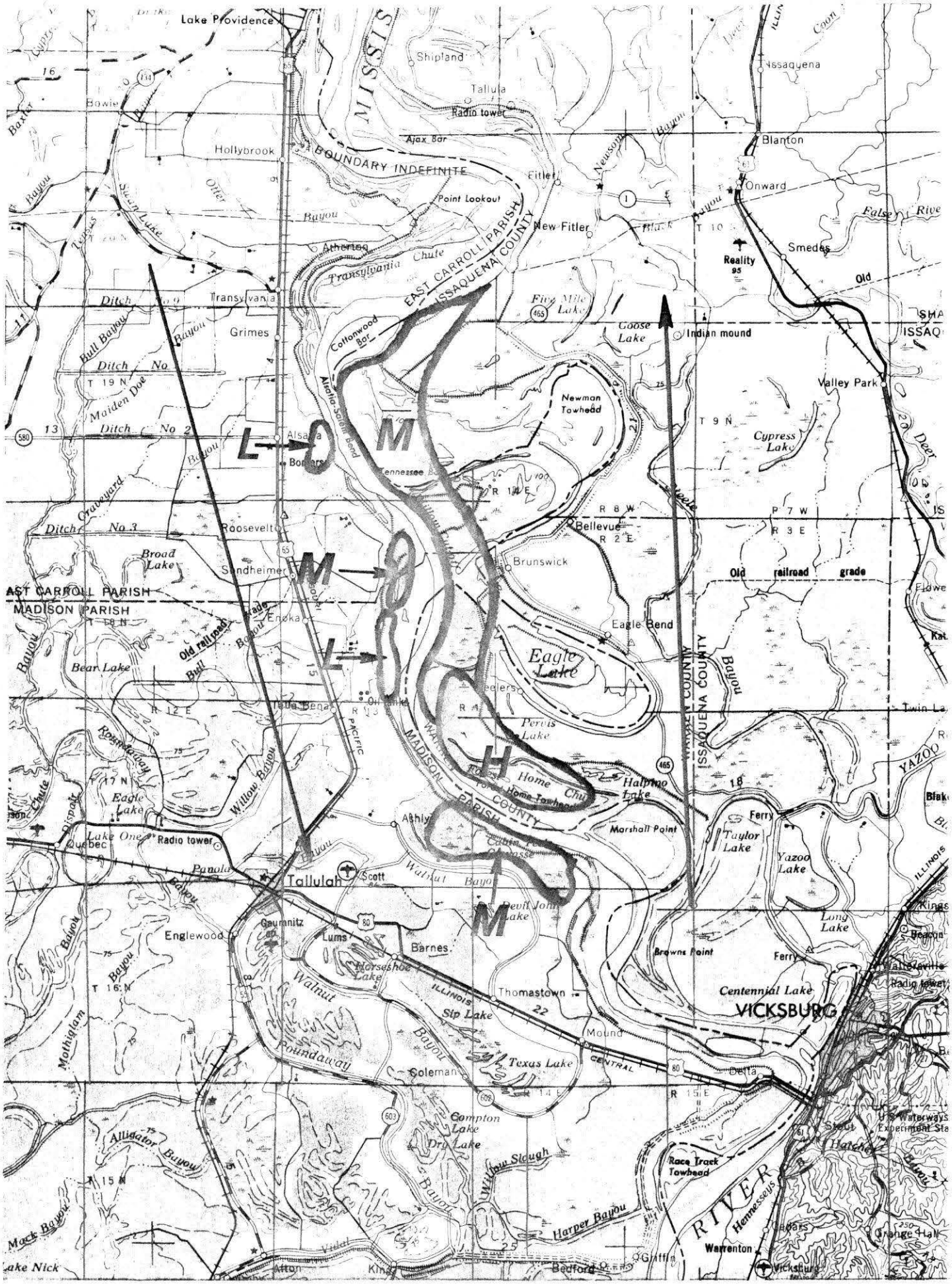
H ► Heavy defoliation

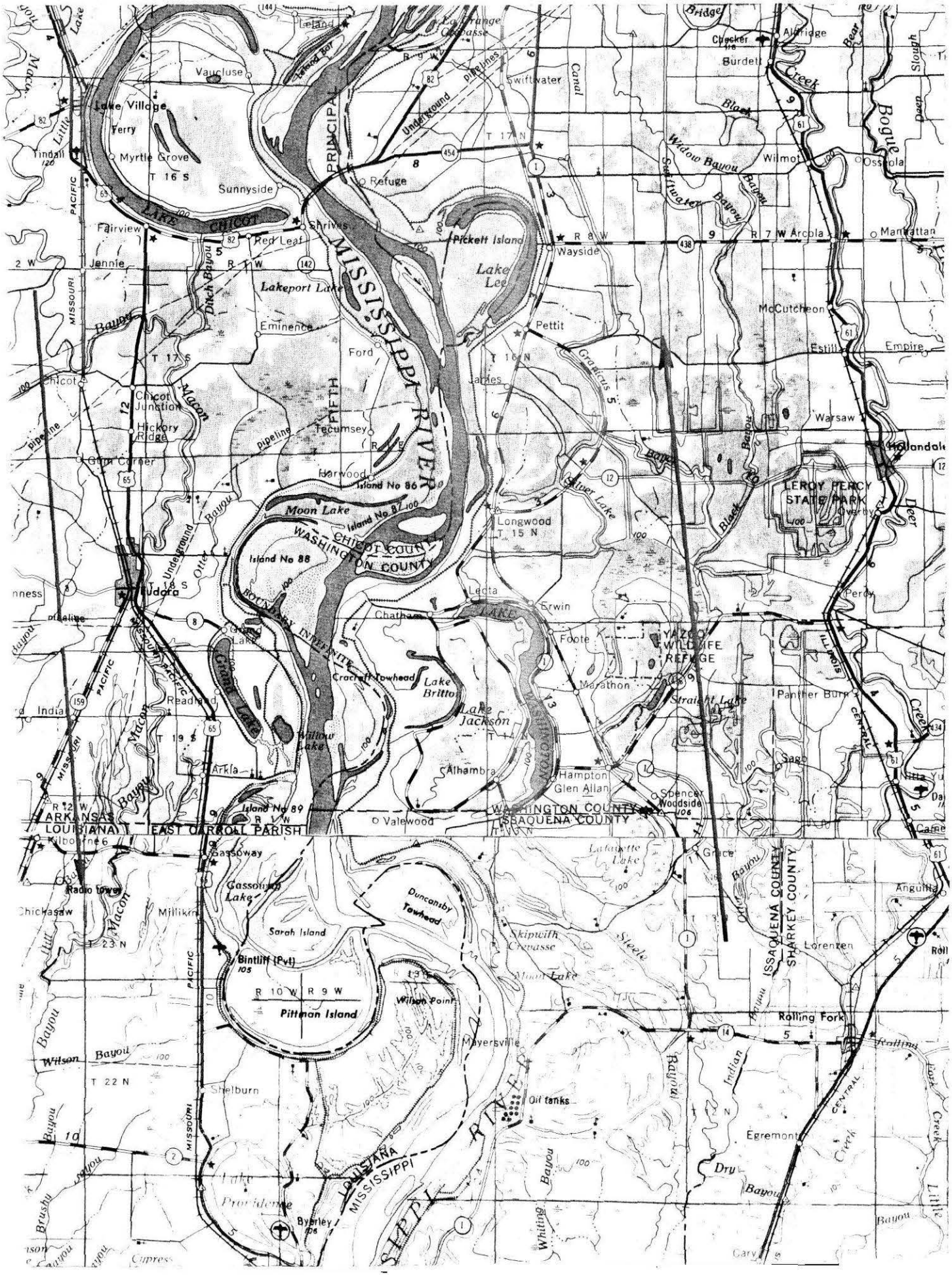


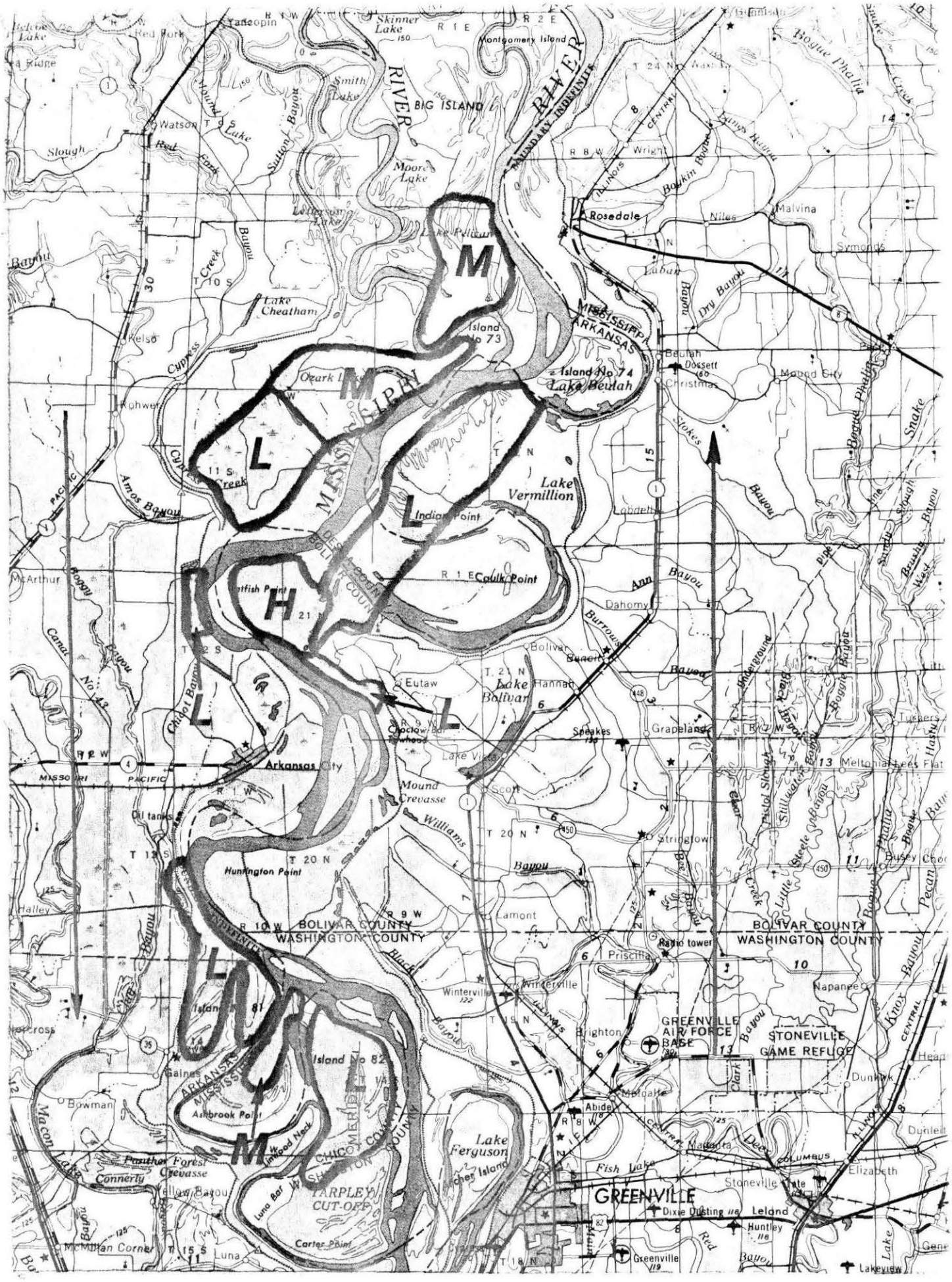


CONTOUR INTERVAL 50 FEET
WITH SUPPLEMENTARY CONTOURS AT 25 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION


Lake Providence
Shipland
Tallula
Radio tower
Ajax Bar
Hollybrook
BOUNDARY INDEFINITE
Fitler
Point Lookout
Bayou
Swan Lake
Otter
Atherton
Transylvania Chute
EAST CARROLL PARISH
ISSAQUENA COUNTY
New Fitler
Blanton
Onward
Smedes
Reality
Old
Transylvania
Ditch
Grimes
Bull Bayou
Ditch No
Maiden Doe
Ditch No 2
Alsatia-Soldier Bend
Cottonwood Bar
Five Mile Lake
Goose Lake
Indian mound
Valley Park
Newman Towhead
Cypress Lake
Deer
Graveyard
Ditch No 3
Roosevelt
Broad Lake
Sondheimer
Brunswick
Old railroad grade
Bellevue
EAST CARROLL PARISH
MADISON PARISH
Old railroad grade
Bayou Eneka
Eagle Bend
Eagle Lake
Bear Lake
Bull
Tulu Bena
Pecan Point
Perrys Lake
Rosedale Way
Willow Bayou
Eagle Lake
Dispark
Chute
Lake One
Quebec
Radio tower
Panola
Bayou
Tallulah
Scott
Walnut Bayou
Devil John Lake
Halpino Lake
Home Chute
Home Towhead
MADISON PARISH
ISSAQUENA COUNTY
Marshall Point
Ferry
Taylor Lake
Yazoo Lake
YAZOO
ILLINOIS
Englewood
Gaumnitz
Lums
Barnes
Horseshoe Lake
Walnut Bayou
Thomastown
ILLINOIS
Slip Lake
Mound
Texas Lake
CENTRAL
Delta
Centennial Lake
VICKSBURG
Long Lake
Browns Point
Ferry
Waterfall
Radio tower
Mathiglan Bayou
Roundaway Bayou
Coleman
Compton Lake
Dry Lake
Alligator Bayou
Willow Slough
Race Track Towhead
Harper Bayou
Mack Bayou
Lake Nick
Vidal
Bedford
Griffin
Warrenton
Vicksburg
RIVER
Hennessey
Grange Hall
U S Waterways Experiment Sta
Hatchery
Bayou
Twin La
Kings
Beaucoup
Walnut Bayou


Lake Village
Terry
Myrtle Grove
Tindall
Vaucluse
Island
Swiftwater
Underground pipelines
Burdett
Allridge
Bear Creek
Slough
Bogue Chitto
Widow Bayou
Wilmot
Osceola
Arcola
Manhattan
Sunnyside
Refuge
Fairview
Shrives
Red Leaf
Pickett Island
Wayside
Lake Lee
Jennie
Lakeport Lake
Ditch Bayou
Eminence
Pettit
McCutcheon
Empire
Ford
James
Chicot
Chicot Junction
Hickory Ridge
Pipeline
Tecumsey
Warsaw
Glen Corner
Harwood
Island No 86
Moon Lake
Island No 87
Silver Lake
LEROY PERCY STATE PARK
Deer Creek
Longwood
Island No 88
CHICOT COUNTY
WASHINGTON COUNTY
Lecta
Erwin
Percy
Udora
Chatham
Foote
YAZOO NATIONAL WILDLIFE REFUGE
Crockett Towhead
Lake Britto
Marathon
Straight Lake
Panther Burn
Readland
Lake Jackson
Willow Lake
Arkla
Alhambra
Hampton
Glen Allan
Spencer
Woodside
Valewood
ARKANSAS
LOUISIANA
EAST CARROLL PARISH
ISSAQUENA COUNTY
SHARKEY COUNTY
Kilbourne
Bassoway
Grace
Lafayette Lake
Cassoulet Lake
Radio tower
Chickasaw
Millikin
Duncansby Towhead
Sarah Island
Skipwith Cutoff
Steele Bayou
Lorenzen
Angola
Bintliff (Pvt)
Wilson Point
Pittman Island
Mayersville
Rolling Fork
Wilson Bayou
Shelburn
Oil tanks
Indian Bayou
Egremont
Dry Bayou
Providence
Lake Providence
Byerley
Whiting Bay
Cary
Cypress Bayou
Little Bayou
MISSISSIPPI RIVER
PRINCIPAL MERIDIAN
FIFTH MERIDIAN
T 16 S
T 17 S
T 17 N
T 16 N
T 15 N
T 19 S
T 23 N
T 22 N
R 12 W
R 10 W
R 9 W
R 8 W
R 7 W
R 1 W
R 1 E
R 1 N
R 1 W
R 2 W
Pacific
Missouri
Central
Illinois


BIG ISLAND
Lake Cheatham
Lake Vermillion
Lake Beulah
Island No 73
Island No 74
Island No 81
Island No 82
Lake Bolivar
Lake Ferguson
Lake Pelican
Lake Hannah
Lake Viola
Indian Point
Coulk Point
Hunkington Point
Ashbrook Point
Mound Crevasse
Panther Forest Crevasse
Arkansas City
GREENVILLE
GREENVILLE AIR FORCE BASE
STONEVILLE GAME REFUGE
BOLIVAR COUNTY
WASHINGTON COUNTY
CHICOT COUNTY
TARPLEY CUT-OFF
MISSISSIPPI RIVER
MISSISSIPPI
ARKANSAS
Rosedale
Beulah
Dossett
Christmas
Mound City
Malvina
Nilus
Symonds
Wright
Watson
Smith Lake
Moore Lake
Skinner Lake
Montgomery Island
Yancopin
Red Fork
Slough
Kelso
Rohwer
McArthur
Dahomy
Bolivar
Eutaw
Grapeland
Sneakes
Stringtown
Lamont
Wintersville
Priscilla
Napanee
Brighton
Melrose
Abide
Madgetta
Fish Lake
Stoneville
Leland
Huntley
Dixie Dusting
Greenville
Lakeview
Gaines
Bowman
McMillan Corner
Connerly
Yellow Bayou
Luna
Carter Point
Luna Bar
Halley
Oil tanks
Radio tower
Choctow Townhead
Labbeth
Laban
Baukin Bridge
Tunnys Bayou
Dry Bayou
Stokes Bayou
Boggy Phalia
Snake Slough
Amos Bayou
Cutler Creek
Cypress Bayou
Sutton Bayou
Lillerton Lake
Red Fork
Mound Creek
Canal No 143
Chicot Bayou
Boggy Bayou
Ann Bayou
Burrous Bayou
Williams Bayou
Sazzle Bayou
Black Bayou
Swan Lake
Clark Creek
Little Sleeste Bayou
Pistol Slough
Stillwater Bayou
Boggie Bayou
Pecan Bayou
Knox Bayou
Central Bayou
Fish Creek
Deer Creek
Macon Lake
Lake Ferguson
Fitcher Island
Deer Island
Luna Bar
Winkwood Neck
Carter Point
Caulk Point
Catfish Point
Indian Point
Ozark Island
Montgomery Island
BOUNDARY IMPERVIOUS
MISSISSIPPI
ARKANSAS
MISSOURI PACIFIC
PACIFIC
ILLINOIS CENTRAL
T 24 N
T 21 N
T 20 N
T 15 S
T 10 S
R 1 E
R 2 E
R 8 W
R 9 W
R 10 W
R 1 W
R 2 W

DEFOLIATION CAUSED BY THE HACKBERRY BUTTERFLY (*Asterocampa celtis* B. AND L.) ALONG THE MISSISSIPPI RIVER, JULY 1978.